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ABSTRACT

A panel of 294 non-metropolitan Pennsylvania women was studied first in 1970 when they were high school sophomores and again in 1981 to assess the relationship between traditional and nontraditional role behaviors and changes in sex-role attitudes. As adolescents in 1970, the women were either extremely liberal or traditional. As young adults in 1981, they expressed more uniformly nontraditional views. That is, the majority overwhelmingly rejected the ideas that education and job opportunities are more important for boys, and that every girl should marry, stay at home, have children, and leave the major family decisions to her husband. Although young women who had expressed liberal sex-role attitudes during their teen years were more likely to further their education than their more traditional counterparts, marital status, number of children, and employment status showed no such statistical association. In general a subject's attitude scores increased on a scale from 1 to 10 from most traditional to least traditional as her educational level increased, but the effect of education was tempered by her mother's educational level; differences associated with increasing schooling were most pronounced when the mother had less than a high school education. Employed women expressed significantly more nontraditional attitudes than did their unemployed counterparts. Married women expressed a more liberal position than did their unmarried peers. (BRR)

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SEX-ROLE ATTITUDE CHANGE OF YOUNG WOMEN: INFLUENTIAL FACTORS FROM A PANEL STUDY

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SEX-ROLE ATTITUDE CHANGE OF YOUNG WOMEN: INFLUENTIAL FACTORS FROM A PANEL STUDY

INTRODUCTION

Relatively rapid and distinct changes in the attitudes and role behaviors of American women have been occurring during the last decade. The seventies, in particular, have been heralded as a period of societal transition characterized by women's increasing employment and educational attainment, a decreasing emphasis on early marriage and parenthood, and the apparent acceptance of nontraditional sex-role ideology. Moreover, changes in sex-role attitudes have not been restricted to specific subgroups of women, rather attitudinal shifts toward increasing liberalism have been found among all groups of women in the population (Mason et al., 1976; Thornton & Freedman, 1979).

Attitudes have been regarded as both causes and effects of behavior. On the one hand, changes in attitudes due to alterations in an individual's social environment can precipitate changes in behavior. For example, a woman who initially disapproves of women's labor force participation may come to accept this state of affairs and seek employment outside her home. Conversely, as suggested by current social psychological theorizing, behavioral changes can lead to attitudinal changes.[2] Regardless of her previous attitudes, a woman may have little choice about working due to social pressure or economic exigency, or both. If her behavior deviates from her initial gender-role beliefs, then she may tend to change her attitudes to fit her actions.

While numerous studies investigating sex-role attitude change have sought to establish the causal priority of either attitudes or behaviors, evidence for both is equivocal. The evidence for an attitudinal effect on

subsequent behavior demonstrates a weak, unstable, and short-term relationship (Miller & Garrison, 1982). Similarly, those studies attempting to replicate research demonstrating the causal priority of behavior have failed to do so either completely or unconditionally. In their summary of the literature, Miller and Garrison (1982:249) conclude that "the impact of individual sex-role attitudes on labor force participation and occupational choice is far more limited than believed earlier" . . . and that "no less significant are current findings that individual sex-role orientations remain largely unaffected by actual work experience."

Rather than choosing between one sequence or the other, at least one researcher has demonstrated that behaviors and attitudes interact resulting in a long-term feedback relationship. Based on their data, Macke et al. (1978:131) conclude "that prior attitudes affect subsequent employment, and that work experience shapes later sex-role attitudes. Consequently, early nontraditional sex-role ideologies may operate to trigger a spiraling pattern, whereby such attitudes influence early labor force behavior (as well as associated marital and childbearing decision), which in turn further alters later attitudes and behavior." Based on this perspective, the question of which is cause and which is effect is indeterminant because the relationship between attitudes and action is reciprocal.

A more fruitful approach for investigating sex-role attitude change, then, may be to focus on the correlates of change in order to understand what experiences relate to shifts in women's beliefs about appropriate female behavior. Although the literature in this area is extensive, the limitations of previous studies have circumscribed the generality of their findings. Much of the early research on young women's sex-role attitude

change used middle-class, college-educated female subjects (Haney, 1982; Mason et al., 1976). There have been relatively few studies of women with more diversified backgrounds and experiences. Moreover, most studies have inferred individual change from cross-sectional data rather than directly measuring shifts in the attitudes of the same subjects across time. Long-term panel studies, in which the same person's attitudes are measured at different points in time using the same instrument, can provide information for assessing the correlates of change and interpreting the effects of long-range individual development (Crider et al., 1973; Glock, 1967).

The extent to which women change their attitudes toward increasing liberalism would be expected to relate to their exposure during their formative years to the nontraditional role behavior of significant others and the women's own traditional or nontraditional gender-role choices. That is, women who had mothers who attained advanced schooling or who were employed, or both, would be expected to express less-traditional sex-role attitudes during their growing-up years and as adults. Those who attained higher education or were employed would, as a concomitant of their personal exposure to these nontraditional patterns, be expected to report more liberal attitudes. Traditional role experiences like marriage and motherhood would likely be related to the maintenance of more conservative or traditional attitudes. In addition, certain aspects of employment could differentially alter a woman's attitudes about appropriate female role behaviors (Spitze & Waite, 1980). The purpose of this study was to assess the relationship between these traditional and nontraditional role behaviors and changes in the sex-role attitudes.

THE RESEARCH PROBLEM

The present analysis drew upon data from a panel study of 294 women from Pennsylvania who were first surveyed in 1970, as high school sophomores, and restudied in 1981 when they were approximately 26 years of age.

The study has four interrelated foci:

1) To describe the changes that occurred in the subject's responses to attitude questions about the traditional female role during the decade studied.
2) To ascertain the nature of the interrelationships among the various indicators of exposure to nontraditional gender-role behavior (mother's education and work status and subject's education, employment status, marital status and number of children) and adolescent attitudes.
3) a. To ascertain the extent to which the women's attitudinal changes during this period were associated with their traditional and nontraditional role experiences, and
   b. To determine how specific aspects of the occupational experience were associated with changes in the attitudes of employed and unemployed women. Considered here were: length of time in the labor force, income, job satisfaction, and the proportion of women in the job.

PROCEDURES

The study from which the data were drawn began in 1970 when more than 11,000 high school sophomores living outside the central cities of

metropolitan areas in Pennsylvania completed questionnaires dealing with aspects of their family backgrounds and their attitudes toward various social practices. Eleven years later, when the subjects were approximately 26-27 years of age, a random sample of 848 people was drawn from participants in the earlier survey. Questionnaires were mailed to these persons, and 549 (64.7 percent) returned completed forms. Of these, the 294 women respondents were the subjects of this analysis.

Nearly all the subjects were white and all had spent at least part of their adolescent years in Pennsylvania. This meant that age and race were controlled and could not confound the relationships under study. Nevertheless, the sample was not homogeneous. In regard to employment status, family background, educational attainment and other attributes, it provided a cross-section of young women in American society today.[3]

The following seven items concerning traditional gender roles were asked in 1970 and again in 1981:

1) A college education is more important for boys than for girls.
2) Every girl should get married if she possibly can.
3) The best place for most women in is the home.
4) A woman should leave the major family decisions to her husband.
5) A married woman should not work outside the home.
6) If a man and woman are equally able to handle a job, the man should still get hired.
7) No woman can be completely happy unless she has children of her own.

At both time periods, respondents were asked to agree (A) or disagree (D) with each item and to indicate the strength of their feelings on a scale from 1 (not very strongly) to 5 (very strongly). A score of A5, coded as 1, indicated the most traditional response, while a score of D5, coded as 10, indicated the most nontraditional. Individuals who failed to answer one or more items were excluded from the analysis. Composite scores for each subject were calculated by obtaining the mean for the seven items. Cronbach's alpha for the 1970 seven-item scale was .622; for the 1981 data, alpha was .786.

The extent to which the subject was exposed to nontraditional role behavior in adolescence was assessed in terms of her mother's employment and education. Mother's work status at the time of the 1970 survey was operationalized as a two-category variable, "not working" (0) and "working outside the home" (1). Mother's educational attainment was assessed by the ranking of the following categories from low to high: 1) did not graduate from high school; 2) high school graduate; 3) some college training; and 4) four-year college graduate.[4]

At the time of the 1981 survey, subjects following the traditional female role were expected to have foregone advanced schooling, married, borne children and become full-time homemakers. To assess the extent to which this pattern was manifest in each subject's life, measures for the following variables were selected:

- Educational level was ranked according to the same categories used to indicate mother's education.
- Employment status was measured by a dummy variable, "zero" meant unemployed; "one" meant employed.

- Marital status was operationalized as a two-category variable, "married" (0) and "single" (1), including never married, widowed, or divorced.
- Number of children was measured by the subject's self-report of the number of her children living in and away from her household at the time of the second survey.

In addition, information on each woman's job history and current occupational situation was compiled. For the employed, the following occupational characteristics were measured:

- Time in the labor force was assessed by the total number of months the subject had worked for pay during the 11-year period.
- The proportion of females in each subject's current occupation, drawn from materials published by the U.S. Department of Labor for 280 job titles, was used to indicate the extent to which her job was female-dominated (U.S. Department of Labor, 1981).
- Income was measured by the subject's reported gross weekly earning from her major paid job.
- Job satisfaction was indicated by the respondent's answer to the following question: Do you consider your present employment to be (3) better (2) about the same or (1) poorer than that secured by others in your age group?

For the unemployed, the total number of months worked and the proportion of females in the subject's last occupational category were used.[5]

ANALYSIS

Whether measured by the composite scores or by the individual item responses, large and statistically significant shifts toward nontraditionalism occurred in the women's responses to the sex-role attitude items during the decade studied, Table I. Moreover, there was increased homogeneity both in the responses to the individual items and across the entire array. The standard deviations were, in every case, lower in 1981 than in 1970 and the spread in the individual item scores in 1981 (8.27 to 8.95) was less than that found in the earlier study (5.40 to 7.32).

[Table I about here]

Furthermore, the distributions of scores for 6 of the 7 individual items in 1970 were, U-shaped, with concentrations of cases on both extreme positions, and relatively few scores in the middle of the distribution; a sizeable proportion of them were markedly liberal; and a substantial percentage were decidedly traditional. By 1980, the item distributions had shifted markedly and, for every attitude statement, the distributions were radically skewed to the left, with modal scores of 10. In no case did more than 15 percent of the sample "agree" with an item. Thus, many of these young women shifted their attitude responses from quite conservative to highly liberal positions during the decade studied. The composite scores for both time periods showed markedly less fluctuation, scatter, and skewness than did the individual items.

The association between the subject's exposure to nontraditional gender roles and adolescent attitudes were examined by calculating bivariate correlation coefficients for all pairs of variables, Table II.

Mother's education was positively related to the respondent's education and 1970 attitudes and negatively associated with their number of children, suggesting that education may have an intergenerational impact on sex-role ideology, subsequent schooling and fertility. However, mother's employment status was unrelated to either her daughter's adolescent attitudes or her subsequent role choices in adulthood. Perhaps the mothers worked due to economic necessity or rationalized their behavior in these terms to their daughters who did not thereby see their mother's employment as challenging traditional norms.

[Table II about here]

Education was significantly related to all of the other measures of nontraditional role exposure except mother's employment. Those women with high education were more likely to work, less likely to marry and bore fewer children than were their less-educated peers. The strength and consistency of the empirical correlations here underscored the importance of education as a concomitant of other behaviors. Similarly, those respondents employed at the time of the 1981 survey were less likey than their unemployed counterparts to be married and have children.

In addition, 1970 attitude scores were positively related to educational attainment. Young women who had expressed liberal sex-role attitudes during their teen years were more likely to further their education than their more traditional counterparts. Marital status, number of children, and employment status showed no such statistical association. Perhaps at the time of the initial survey, these young women were making choices about advancing their education and were less likely to be considering employment, marriage, and motherhood. Thus, the evidence here

suggests that youthful attitudes may affect immediate gender-role choices, but knowing one's sex-role ideology does not mean that later behaviors are predictable.

The extent to which sex-role attitude change was associated with the subject's experience with nontraditional work and educational roles was tested by examining the relationships of mother's employment and education, and subject's educational level, employment status, marital status, and number of children to her 1981 composite attitude score. Differences among the subjects' initial attitudes were controlled by entering the 1970 scores into the multiple regression equation. Moreover, since the independent variables might be conditionally related to sex-role attitude change, all first-order interactions were examined by calculating the product of the two variables and incorporating these terms separately into the equation with the remaining independent variables (see Cohen & Cohen, 1975:291-339). The two interactions (mother's education X subject's education) and (subject's education X number of children), which emerged as having potential explanatory power, were then incorporated into the original equation. This initial model was simplified by consecutively deleting the nonsignificant terms beginning with the "least" significant ones to obtain a "reduced" equation. The final model included the first interaction (mother's education X subject's education), its main effects, employment status, and the 1970 attitude score, Table III.

[Table III about here]

In both the bivariate and the multivariate analysis, employed women expressed significantly more nontraditional attitudes than did their unemployed counterparts. The relationship of respondent's educational

level to the liberal shift of her sex-role attitudes differed, depending upon how much schooling her mother had, Table IV. In general, a subject's attitude scores increased as her educational level increased, but the effect of education was tempered by mother's education.[6] That is, the differences associated with increasing schooling were most pronounced when mother had less than a high school education; however, when mother had some college, daughter's own educational level showed no relationship to liberalism. Furthermore, the effect of mother's education differed depending upon the respondent's own education. When the subject had only a high school education, the more schooling her mother had, the more likely she was to indicate nontraditional attitudes. However, if she were a college graduate, mother's educational level was actually inversely related to liberalism scores. Such a pattern suggests that the effect of higher education on these young women's attitudes was weakened if their mothers also had some college training. Neither marital status nor number of children, factors indicative of traditional role behavior, were significantly related to 1981 attitude scores in the multiple equation.

[Table IV about here]

To investigate the impact of different aspects of the work experience on sex-role attitude liberalism, the sample was subsorted into "presently employed" and "unemployed" groupings. For the employed, total time worked, percentage of females in the subject's present occupation, income, and job satisfaction were added to the explanatory model used in the previous analysis. Again, all two-way interactions were examined using the procedures described above and two were entered in the original equation (mother's education X respondent's education) and (marital status X total

time worked). These remained in the reduced equation along with weekly income from major job, Table V. All "main effects" of the variables involved in the interaction were also retained.

[Table V about here]

Women with higher incomes demonstrated greater sex-role liberalism than did their lesser paid counterparts. Also, the pattern of the conditional association of mother's and daughter's education to change in attitudes was similar to that found for the total sample, Table VI. That is, when mother's education was less than high school, the more highly educated the subject, the more liberal her sex-role attitudes. However, for those with mothers who had some college, the educational level of the subject was negatively associated with liberalism.

[Table VI about here]

Similarly, the effect of time in the work force on sex-role attitudes depended upon marital status, Table VII. The longer single women had worked, the greater their sex-role liberalism. For married women, no such pattern was found. Married women demonstrated more liberal attitudes than did their single counterparts regardless of how long they had been employed, but the differences declined as number of months worked increased.

[Table VII about here]

Job satisfaction and the proportion of women in the subject's current occupational category were not significantly related to the respondent's attitudes for the employed women in the sample.

Using the same analysis procedures as described above, for the unemployed, neither the total time worked nor the percentage of females in their last job category held were statistically related to sex-role attitudes. Only respondent's education was significantly related to attitude score. The higher the subject's educational attainment, the higher she scored on sex-role liberalism.[7]

SUMMARY

Even the most casual observer of American Society has recognized by now that the normative standards regulating appropriate gender-role behaviors have been changing. Still, the extent to which shifts in the sex-role attitudes of young women are linked with actual role enactment needs further documentation. This study, which measured the attitudes and individual role performances of the same individuals over more than a decade, offers the useful information for addressing these ideas. Congruent with similar studies, women in the sample shifted their sex-role attitudes markedly toward increasing liberalism. As adolescents in 1970, they were either extremely liberal or traditional. As young adults in 1981, they expressed more uniformly nontraditional views. That is, the majority overwhelmingly rejected the ideas that education and job opportunities are more important for boys and that every girl should marry, stay at home, have children, and leave the major family decisions to her husband.

These women's adolescent attitudes, measured in 1970, were related to mother's education but not their mother's work status suggesting that while higher education had an intergenerational liberalizing effect on youthful attitudes, mother's employment may not have represented a challenge to

traditional norms. Perhaps the perception of economic necessity heavily outweighted any ideological concerns where mother's motivation to work was involved. In addition, Altman (1977) has demonstrated the importance of mother's career orientation, attitudes and expectations in explaining daughter's sex-role orientation. Similarly, adolescent attitudes were predictive of the subjects later educational attainment, but not of other adult gender-role choices about employment, marriage and motherhood. Thus, those adolescent women who expressed more liberal sex-role attitudes were more likely to further their formal education than were their more ideologically traditional peers.

Exposure to nontraditional female role behavior through higher education and paid employment was expected to lead to increasing rejection of the traditional female role. Conversely, it was hypothesized that marriage and motherhood would reinforce traditional values. These hypotheses were only partially supported. Marital status was associated with changes in sex-role ideology, but only for the employed, and here the relationship was the reverse of that expected. Married women expressed a more liberal position than did their unmarried peers. Molm (1978:350) has suggested that "different attitudes may be reinforced as a result of contact with different sets of associates." A single working woman may have fewer encounters which challenge her notions of appropriate gender-role activities, while a married woman who also works may experience more role conflict as a result of her social experiences leading to greater shifts in her ideas about women's roles. The difference between married and unmarried workers declined with increasing time in the labor force, but was still evidenced after at least eight years of working.

Education and employment were, as predicted, both significantly related to shifts in sex-role ideology. Employed women changed significantly more than women who were unemployed. The higher the woman's educational attainment, the more she changed her attitudes, however, this relationship was tempered by mother's education. If mother had attended college, the effect of the respondents advanced schooling was eliminated. Perhaps observing their own highly educated mothers in traditional family roles meant that these young women did not perceive conflict between getting a college education and traditional female role behavior.

For those women who were working at the time of the 1981 survey, income was positively and significantly related to attitude change, but time in the labor force, the percentage of females in the job and job satisfaction were not related to shifts in sex-role ideology. For the unemployed, neither the time worked nor the proportion of women in the job category were associated with attitude change.

These findings underscored the complexity of social behavior and attitudes. The expected simple patterns of association of traditional and nontraditional role behavior to attitude change were simply not found. Some of the hypothesized relationships did not occur, others were more complex and conditional than anticipated. Moreover, none of these findings completely delineate the process by which attitude change occurs. For that, a more exact determination of the sequence of the events is needed. Nevertheless, the present results do suggest some of the circumstances associated with personal attitude change concerning appropriate gender roles.

FOOTNOTES

[2]That behavior precedes and causes attitudinal changes is hypothesized by Bem's (1968) theory of self-perception; Jones and Nisbett's (1971) self-attribution theory; and Festinger's (1957) theory of cognitive dissonance. To Bem an attitude is merely a self-description. According to Jones and Nisbett, and individual takes into account situational factors and his own behavior in forming his attitudes. Similarly, Festinger theorizes that inconsistencies between cognitions about an actor's role beliefs and actual behaviors lead to attitude changes that are consistent with the latter.

[3]Data from the 1970 and 1980 U.S. Census reports for women in the appropriate age and race categories in Pennsylvania were compiled and compared with the sample distributions. No significant differences were found in regard to mother's education and work status or for subject's educational attainment and employment status. The sample did, however, contain proportionately more married, and slightly fewer women with no children or only one child than the corresponding census reports. To the extent that these variables relate to attitudes, the findings here could be distorted. However, as will be documented in the later analysis, no such associations were found.

[4]The procedure of treating rank values as if they constituted an interval scale has been defended by others. See, for example, Bohrnstedt & Knoke, 1982:16-19. The reasonableness of the procedure for the current data was checked by recalculating selected aspects of the analysis using covariance procedures where the categorical variables were treated as nominal scales with no assumptions of linearity. The results were similar

suggesting that, at least for this case, the use of these rank scores in correlation-regression analysis did not distort the meaning of the data.

[5]Only 16 women in the sample had never worked outside the home. They were included in the unemployed grouping and received a score of "100" on the variable measuring the proportion of females in their last occupation based on the rationale that if they were never employed, their "last job" was as full-time housewife or homemaker - an entirely female-dominated occupation. This value did not differ markedly from others in the distribution. Secretaries had a score of 99, nurses were scored 96, dress factory operatives 96, and kindergarten teachers 98.

[6]Since only 10 respondents failed to graduate from high school and only a slightly larger number had mothers with a college degree, these extreme, low frequency categories, were not reported in the tables. Also, because the "estimated" scores were calculated from predictive equations derived in the correlation-regression analysis, the values reported in the table reflect the linear pattern that was assumed in fitting that model to the data. Although the "fit" of this model was "statistically significant," the descriptive analysis here was rerun using analysis of covariance, where the intervally scaled variables were entered as covariates and the remaining factors entered as nominal scales. The pattern of adjusted means obtained did not differ in any important way from the estimated values reported here.

[7]Because the unemployed sample was smaller than the employed, it seemed plausible that the paucity of significant relationships here resulted more from the small sample size than from the strength of the manifest associations. However, a closer examination of the results found none of these other relationships significant at the .10 level and none of

the partial correlations approached the magnitude of the significant relationships found for the employed sample.

REFERENCES

Altman, S. L. & Grossman, F. K. Women's career plans and maternal employment. Psychology of Women Quarterly, 1977, 1, 365-376.

Bem, D. J. Attitudes as self-descriptions: Another look at the attitude-behavior link. In A. G. Greenwald, T. C. Brock, and T. M. Ostrom (Eds.), Psychological Foundations of Attitudes. New York: Academic Press, 1968.

Bohrnstedt, G. W. & Knoke, D. Statistics for Social Data Analysis. Itasca, Illinois: F. E. Peacock Publishers, Inc., 1982.

Cohen, J. & Cohen, P. Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc., 1975.

Crider, D. M., Willits F. K., & Bealer, R. C. Panel studies: Some practical problems. Sociological Methods and Research, 1973, 2, 3-18.

Festinger, L. A Theory of Cognitive Dissonance. Stanford: Stanford University Press, 1957.

Glock, C. Y. Survey Research in the Social Sciences. Hartford, Connecticut: Russell Sage Foundation, 1967.

Haney, W. G. Women. In Don A. Dillman and Daryl J. Hobbs (Eds.), Rural Society in the U.S.: Issues for the 1980s. Boulder, Colorado: Westview Press, 1982.

Jones, E. E. & Nisbett, R. E. The Actor and the Observer: Divergent Perceptions of the Causes of Behavior. New York: General Learning Press, 1971.

Macke, A. S., Hudis, P. M., & Larrick, D. Sex-role attitudes and employment among women: dynamic models of continuity and change. In I. Sawhill (Ed.), Women's Changing Roles at Home and on the Job. (Special Report No. 26.) Washington, D.C.: U.S. Government Printing Office, 1978.

Mason, K. O., Czajka, J. L., & Arber, S. Change in the U.S. women's sex-role attitudes, 1964-1974. American Sociological Review, 1976, 41, 573-596.

Miller, J. & Garrison, H. H. Sex roles: The division of labor at home and in the work place. Annual Review of Sociology, 1982, 8, 237-262.

Molm, L. D. Sex-role attitudes and the employment of married women: The direction of causality. Sociological Quarterly, 1978, 19, 522-533.

Spitze, G. D. & Waite, L. J. Labor force and work attitudes, young women's early experiences. Sociology of Work and Occupations, 1980, 1, 3-32.

Thornton, A. & Freedman, D. Changes in the sex-role attitudes of women, 1962-1977: Evidence from a panel study. American Sociological Review, 1979, 44, 831-842.

U.S. Department of Labor, Bureau of Labor Statistics Employment and Earnings, January 1981. Washington, D.C.: U.S. Government Printing Office, 1981.

Table I. Changes in women's attitudes toward aspects of the traditional female role, 1970 to 1981 (N=270).

Item	Year				Paired t
	1970		1981		
	$\bar{X}^a$	S	$\bar{X}^a$	S	
A college education is more important for boys than for girls.	5.92	3.51	8.57	2.32	11.78***
Every girl should get married if she possibly can.	6.27	3.17	8.57	2.23	10.22***
The best place for most women is in the home.	6.16	3.38	8.62	2.32	10.65***
A woman should leave the major family decisions to her husband.	5.40	3.37	8.57	2.58	13.35***
A married woman should not work outside the home.	7.32	2.72	8.95	1.81	8.65***
If a man and woman are equally able to handle a job, the man should still get hired.	5.98	3.47	8.35	2.56	10.19***
No woman can be completely happy unless she has children of her own.	6.04	3.39	8.27	2.21	9.82***
COMPOSITE SCORE (for all seven items)	6.16	1.75	8.56	1.46	19.28***

***Significant .001

[a]Responses are scored on a 10-point scale from strongly agree (1) to strongly disagree (10).

Table II. Intercorrelations among the indicators of exposure to nontraditional gender role behavior and 1970 attitudes (N=261).

Variable	Mother's Education	Mother's Work Status	Education	Employment Status	Marital Status	Number of Children
	r-values					
Mother's work status	-.017					
Education	.314***	-.073				
Employment status	.090	.030	.189**			
Marital status	.121	-.032	.210***	.206***		
Number of children	-.157*	.007	-.422***	-.359***	-.395***	
1970 Attitude Score	.150*	-.009	.226***	.049	.089	-.019

*Significant .05
**Significant .01
***Significant .001

Table III. Correlation-regression analysis for the relationships of selected educational and occupational variables to 1981 attitudes toward the traditional female role controlling for 1970 attitude scores (N=261).

Independent Variable	Bivariate Correlations	Original Equation		Reduced Equation	
		b-values	Beta	b-values	Beta
Mother's education	.062	.715*	.412*	.817*	.471*
Mother's work status	-.012	-.024	-.008	--	--
Education	.244***	.710*	.417*	.920***	.540***
Employment status	.200***	.539**	.179**	.477**	.158**
Marital status	.023	-.185	-.053	--	--
Number of children	-.136*	-.456	-.321	--	--
Educ X children interaction	-.048	.184	.294	--	--
Mother's educ X Educ interaction	.126*	-.272*	-.629*	-.310**	-.716**
1970 Composite Attitude Score	.200***	.132**	.158**	.125*	.150*
Constant		5.740		5.177	
Multiple R		.379***		.364***	
R^2		.144		.132	

*Significant .05
**Significant .01
***Significant .001

Table IV. Estimated attitude scores for the interactive effect of mother's education and respondent's education on 1981 sex role attitudes using the reduced equation.

Respondent's Education	Mother's Education		
	<H.S.	H.S. Grad	Some College
	----------Estimated Attitude Score----------		
H.S. grad	8.3	8.5	8.7
Some college	8.9	8.8	8.7
College grad	9.5	9.1	8.7

Table V. Correlation-regression analysis for the relationships of selected educational and occupational variables to 1981 attitudes toward the traditional female role controlling for 1970 attitudes for employed and unemployed.

Independent Variables	Employed Women (N=143)			Unemployed Women (N=94)		
	Bivariate Correlations	Reduced Multiple Equation b-values	Beta	Bivariate Correlations	Reduced Multiple Equation b-values	Beta
Mother's education	.049	1.162**	.751**	-.003	--	--
Mother's work status	-.008	--	--	.035	--	--
Education	.156	.930**	.615**	.244*	.472*	.229*
Marital status	-.094	-2.309**	-.762**	.034	--	--
Number of children	-.004	--	--	-.108	--	--
Total time worked	.081	-.006	-.116	.148	--	--
Percent female in last job category	-.158	--	--	-.107	--	--
Income (present job)	.236**	.002*	.210*			
Job satisfaction	.056	--	--	--	--	--
Mother's educ X Educ	.061	-.402**	-1.079**	.083	--	--
Marital status X time worked	-.029	.020*	.618*	--	--	--
1970 Composite Attitude Score	.182*	.119	.158	.122	.074	.079
Constant		5.568			6.653	
Multiple R		.435***			.256*	
R^2		.189			.065	

*Significant .05
**Significant .01
***Significant .001

Table VI. Estimated attitude scores for the interactive effect of mother's education and respondent's education on 1981 sex role attitudes, using the reduced equation, employed only.

Respondent's Education	Mother's Education		
	<H.S.	H.S. Grad	Some College
	Estimated Attitude Score		
H.S. grad	8.5	8.8	9.2
Some college	9.0	9.0	8.9
College grad	9.5	9.1	8.6

Table VII. Estimated attitude scores for the interactive effect of marital status and total time worked (in months) on 1981 sex role attitudes, using the reduced equation, employed only.

Time Worked (in months)	Marital Status	
	Single	Married
	------Estimated Attitude Score------	
60	8.0	9.1
80	8.3	9.0
100	8.6	8.9